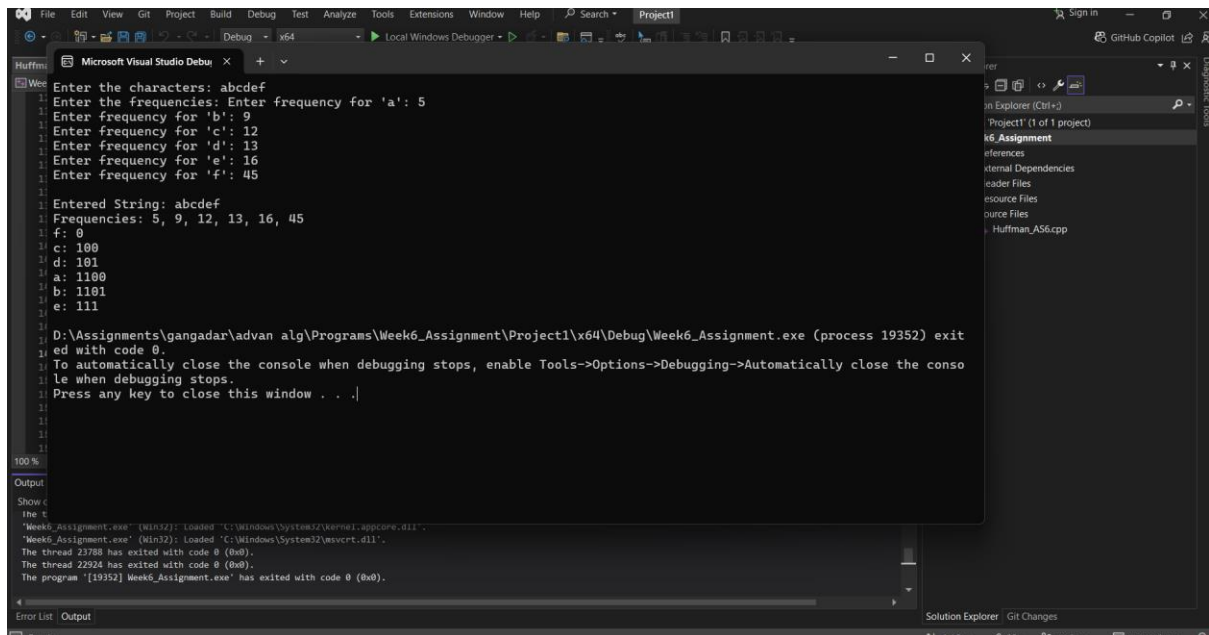


GangadharGowdJogi

## Week6 – Huffman Codes

### Sample Execution Screenshot



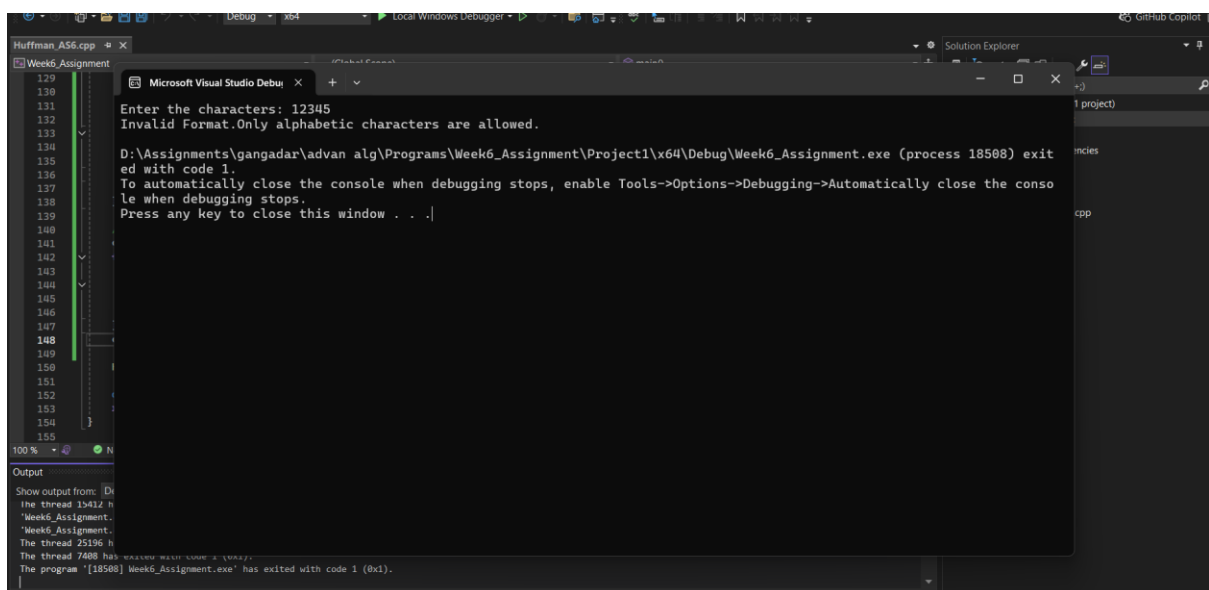
The screenshot shows the Visual Studio Debug Console with the following output:

```
Enter the characters: abcdef
Enter the frequencies: Enter frequency for 'a': 5
Enter frequency for 'b': 9
Enter frequency for 'c': 12
Enter frequency for 'd': 13
Enter frequency for 'e': 16
Enter frequency for 'f': 45
Entered String: abcdef
Frequencies: 5, 9, 12, 13, 16, 45
f: 0
c: 100
d: 101
a: 1100
b: 1101
e: 111
D:\Assignments\gangadar\advan alg\Programs\Week6_Assignment\Project1\x64\Debug\Week6_Assignment.exe (process 19352) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .|
```

The Output window at the bottom shows the following debug messages:

```
Week6_Assignment.exe' (Win32): Loaded 'C:\Windows\System32\kernel.appcore.dll'.
Week6_Assignment.exe' (Win32): Loaded 'C:\Windows\System32\user32.dll'.
The thread 23788 has exited with code 0 (0x0).
The thread 22924 has exited with code 0 (0x0).
The program '[19352] Week6_Assignment.exe' has exited with code 0 (0x0).
```

### Invalid input handle



The screenshot shows the Visual Studio Debug Console with the following output:

```
Enter the characters: 12345
Invalid Format.Only alphabetic characters are allowed.
D:\Assignments\gangadar\advan alg\Programs\Week6_Assignment\Project1\x64\Debug\Week6_Assignment.exe (process 18508) exited with code 1.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .|
```

The Output window at the bottom shows the following debug messages:

```
Week6_Assignment.exe' (Win32): Loaded 'C:\Windows\System32\kernel.appcore.dll'.
Week6_Assignment.exe' (Win32): Loaded 'C:\Windows\System32\user32.dll'.
The thread 18412 has exited with code 1 (0x1).
The thread 25196 has exited with code 1 (0x1).
The program '[18508] Week6_Assignment.exe' has exited with code 1 (0x1).
```

```
123 for (int i = 0; i < n; ++i) {
124
125
126
127
128
129 Enter the frequencies: Enter frequency for 'q': -1
Invalid input.. Please enter a positive numeric value(>0) for the frequency....
130 Enter frequency for 'q': a
Invalid input.. Please enter a positive numeric value(>0) for the frequency....
131 Enter frequency for 'q': 0
Invalid input.. Please enter a positive numeric value(>0) for the frequency....
132 Enter frequency for 'q': 12
133 Enter frequency for 'w': 78
134 Enter frequency for 'e': 1
135 Enter frequency for 'r': 5
136
137
138
139 Entered String: qwer
140 Frequencies: 12, 78, 1, 5
141 e: 000
142 r: 001
143 q: 01
144 w: 1
145
146
147 D:\Assignments\gangadar\advan alg\Programs\Week6_Assignment\Project1\x64\Debug\Week6_Assignment.exe (process 24272) exit
148 ed with code 0.
149 To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .]
```

## Output

```
123 for (int i = 0; i < n; ++i) {
124 while (true) {
125 cout << "Enter frequency for '" << s[i] << "': ";
126 cin >> freq[i];
127
128
129
130 Enter the characters: qwd
131 Enter the frequencies: Enter frequency for 'q': 12
132 Enter frequency for 'w': 13
133 Enter frequency for 'd': 56
134
135 Entered String: qwd
136 Frequencies: 12, 13, 56
137 q: 00
138 w: 01
139 d: 1
140
141
142 D:\Assignments\gangadar\advan alg\Programs\Week6_Assignment\Project1\x64\Debug\Week6_Assignment.exe (process 24764) exit
143 ed with code 0.
144 To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
145 Press any key to close this window . . .]
```